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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,488	08/09/1999	MICHAEL A. EPSTEIN	PHA-23.744	8165

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EXAMINER

CALLAHAN, PAUL E

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/370,488

Applicant(s)

EPSTEIN, MICHAEL A.

Examiner

Paul E. Callahan

Art Unit

2134

-- The MAILING DATE of this communication --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 8-9-1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 1999 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-17 are pending in this Application and have been examined.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "963" has been used to designate both transmission of "x" from Device A 400 to Remote Device 390 and transmission of "x" from Remote Device 390 to Device B 954. Item number 941 is similarly used in referencing two items in fig. 5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 4 contain the language of "A controller that effects the communication of the parameter and the other parameter." It is unclear what is meant by the term "effects." Claim 5 is dependent on claim 4 and is therefore rejected on the same basis as claim 3 and 4.

Art Unit: 2134

5. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 contains the language of "...the first cryptographic key and the second cryptographic key are substantially equal." It is unclear what is meant by "substantially equal."

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 6, 7 and 10-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shinyagaito et al., US Patent 5,886,753.

As per claims 1 and 11, Shinyagaito teaches a remote control device, having a transceiver, that is configured to facilitate control of a plurality of electronic devices each having a transceiver (fig. 1), comprising: an input device that is configured to accept a user input and provides therefrom a control signal for control of a first device of the plurality of electronic devices (col. 1 lines 40-50), and a receiver that is configured to receive a parameter from a second device of the plurality of electronic devices (col. 1 lines 50-60), and, a transmitter that is configured to: communicate the parameter from the second device to the first device, and, communicate the control signal to the first device to effect the control of an appliance function of the first device (col. 2 lines 30-67).

Art Unit: 2134

As per claims 2, 7 and 12, Shinyagaito teaches a remote control device, wherein the receiver is further configured to receive an other parameter from the first device, and the transmitter (transceiver) is further configured to communicate the other parameter from the first device to the second device (col. 1 lines 40-60, col. 2 lines 30-67).

As per claim 3, Shinyagaito teaches a remote control device, further including a controller that effects the communication of the parameter and the other parameter (col. 1 lines 50-60).

As per claim 6, Shinyagaito teaches an electronic device comprising: a transceiver that is structured to receive control commands from a remote control device (col. 1 lines 50-60), an appliance apparatus that effects a processing of input information in dependence upon the control commands, a parameter generator that produces a parameter for communication to an other device, and wherein, the transceiver is also structured to transmit the parameter, thereby effecting the communication of the parameter to the other device (col. 2 lines 30-67).

As per claim 10, Shinyagaito teaches an electronic device, wherein the appliance apparatus includes at least one of: a set-top box, a tuner, a display device, a recording device, and a playback device (fig. 1 "t.v.").

Art Unit: 2134

As per claim 13, Shinyagaito teaches transmitting a second parameter from the second device via a transmitter of the transceiver of the second device, and receiving the second parameter at the first device via a receiver of the transceiver of the first device (col. 2 lines 49-62).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4, 5, 8, 9, 14, 15, and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinyagaito as applied to claim 1 above, in view of Diffie et al. US Patent 5,371,794, and Bruce Schneier, Applied Cryptography 2nd Ed., Oct. 1995, John Wiley & Sons Pub.

As per claims 4, 8 and 14, Shinyagaito does not teach a remote control device, wherein the controller effects the communication of the parameter and the other parameter to establish a cryptographic key exchange. Diffie does teach this establishment of cryptographic key exchange between two such communicating devices (abstract, figs. 4a, 4b, 4c, fig. 5b). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Shinyagaito. It would have been desirable to do so as this would allow for more secure communications between the devices.

Art Unit: 2134

As per claim 15, Shinyagaito does not teach generating a first cryptographic key at the first device based on the second parameter, and generating a second cryptographic key at the second device based on the first parameter, wherein the second cryptographic key is suitable for a decryption of material that is encrypted using the first cryptographic key, However Schneier does teach these steps at p. 520. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Shinyagaito. It would have been desirable to do so as this would allow for more secure communication between the devices.

As per claims 5, 9 and 17, the combination of Shinyagaito and Diffie does not teach the use of Diffie-Hellman key exchange explicitly by a parameter generator. Schneier does teach this at p. 519-520: "Implementing EKE (Encrypted Key Exchange) with Diffie-Hellman. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Shinyagaito and Hellman. It would have been desirable to do so as this would allow for more secure communications between the devices.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (703) 305-1336. The examiner can normally be reached on M-F from 9 to 5.

Art Unit: 2134

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 Official Faxes, (703) 746-7240 Unofficial Faxes, and (703) 746-7238 After Final Faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

5/1/03

Paul Callahan